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ABSTRACT

This experimental unit consists of developmental activities for grades 1-3 to help children become more aware of their environs. The three main areas of emphasis are: distance, direction, and symbols. The specific goals in each of these areas are: 1) Distance--to measure, compute distances and finally understand simple scales; 2) Direction--to follow simple directions and to locate specific areas on a map; and, 3) Symbols--to identify symbols and their function on a map. It is hoped that by reinforcing mapping activities with a variety of materials in each grade, children will progress to a more sophisticated understanding of maps. The activities are listed according to grade level and each of the concepts mentioned above. A variety of both indoor and outdoor activities are suggested. (Author/JLB)

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MAPS

for

HERE

THERE

EVERYWHERE

SO 002 526

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MAPPING SUPPLEMENT

This is included on page 6 and 7

MAP--1

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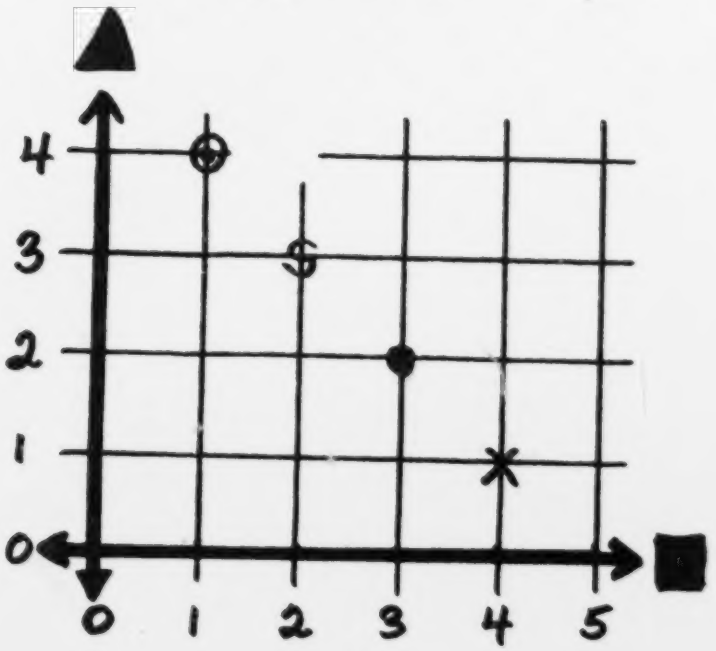
Supplement for Mapping Unit



	■	▲
● →	3	2
x →	4	1
S →	2	3
⊙ →	1	4

~Graphing Equations~

On each graph are two number lines. The horizontal line is the ■ number line. The vertical line is the ▲ number line. Always start at 0. On most every page is a chart. On the chart you will keep a record of all your moves on that particular page.

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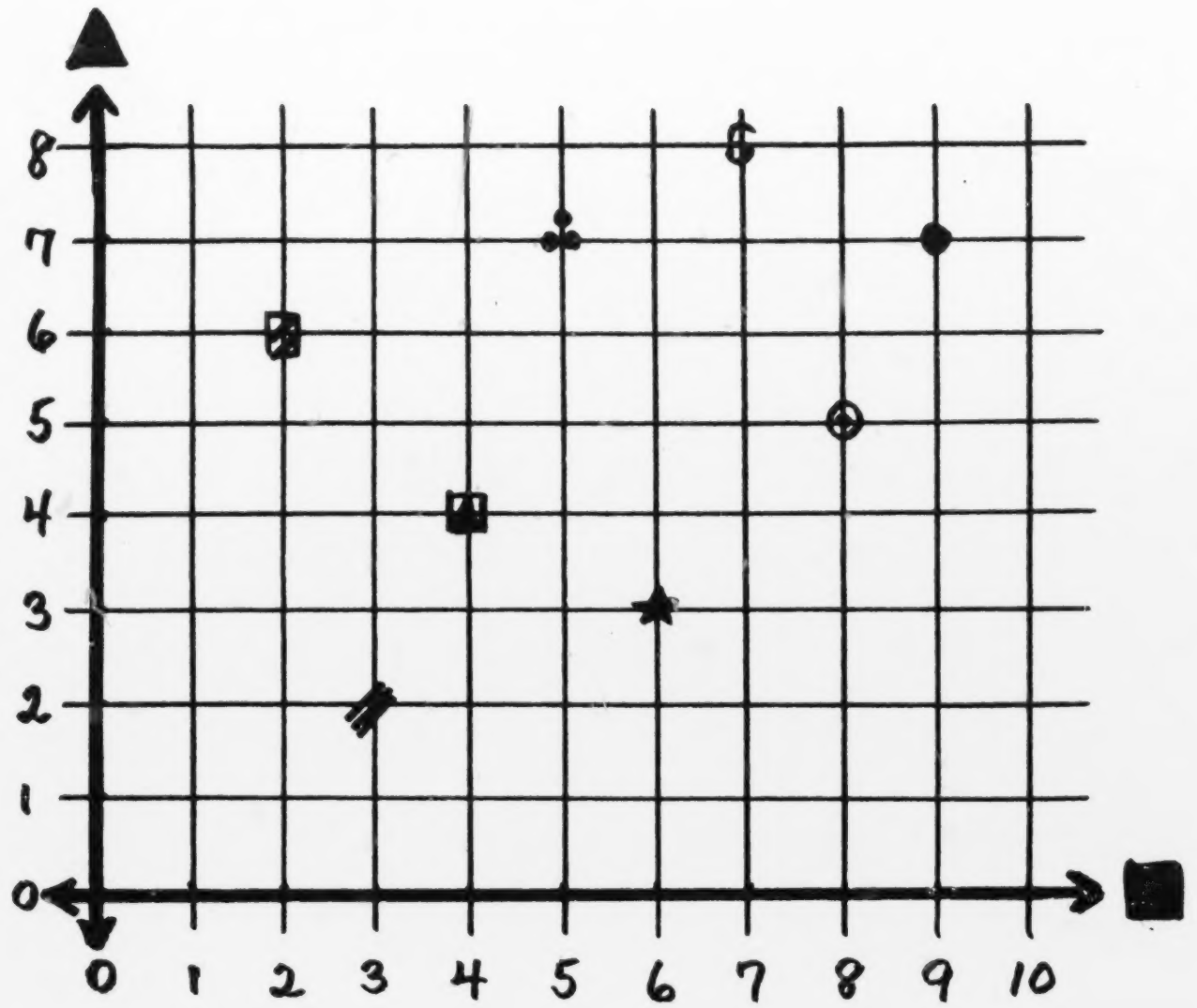

★ 6 over 3 up

⊙ □ over △ up

▨ □ over △ up

S □ over △ up

● □ over △ up

/// □ over △ up

∴ □ over △ up

◭ □ over △ up

■	▲
6	3

2. : 3

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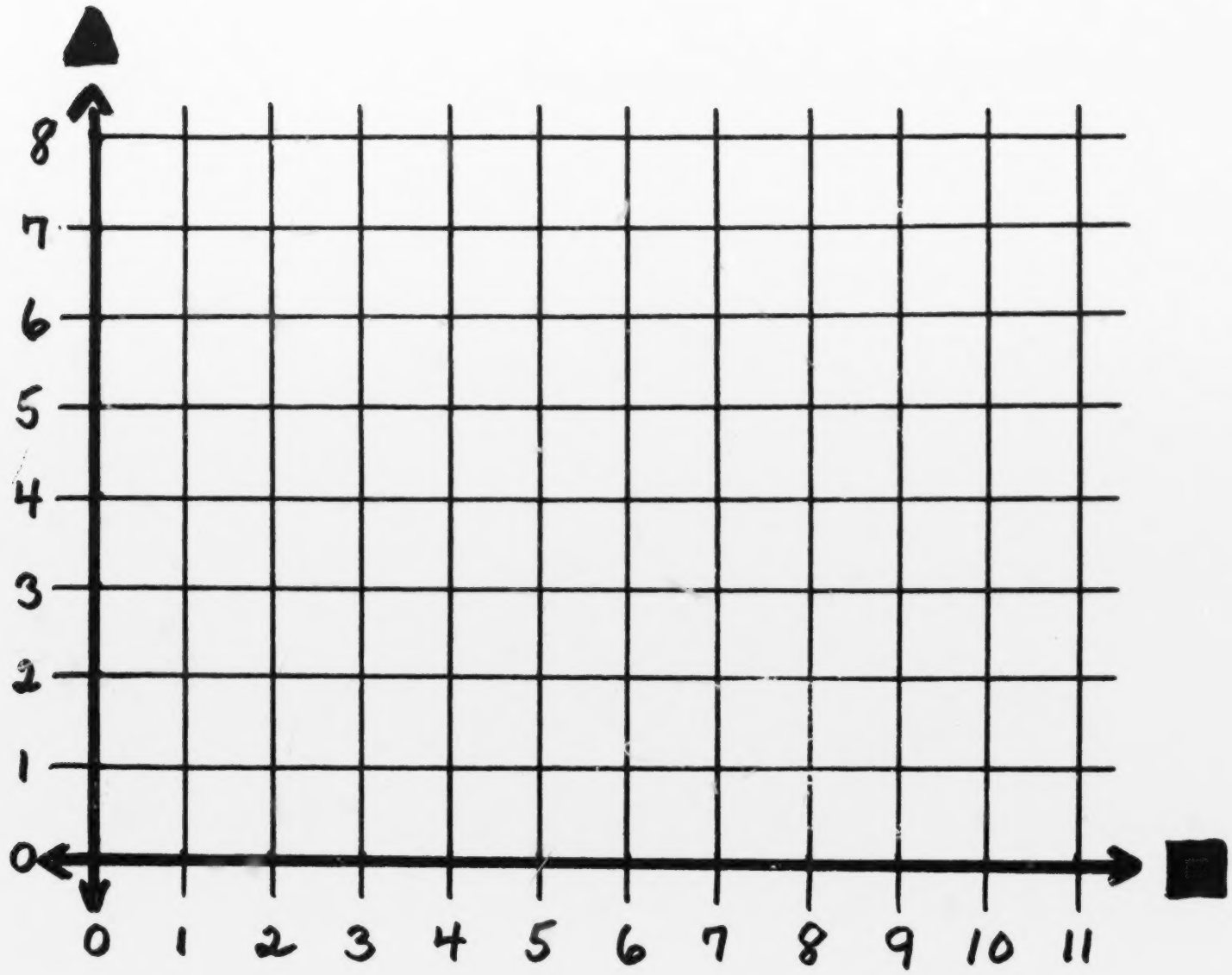

	■	▲
Write ⊖ at →	5	4
Write ◘ at →	1	5
Write ⊗ at →	7	3
Write * at →	6	0
Write ✿ at →	2	6
Write ⬡ at →	0	4
Write A at →	8	8
Write ▬ at →	4	2

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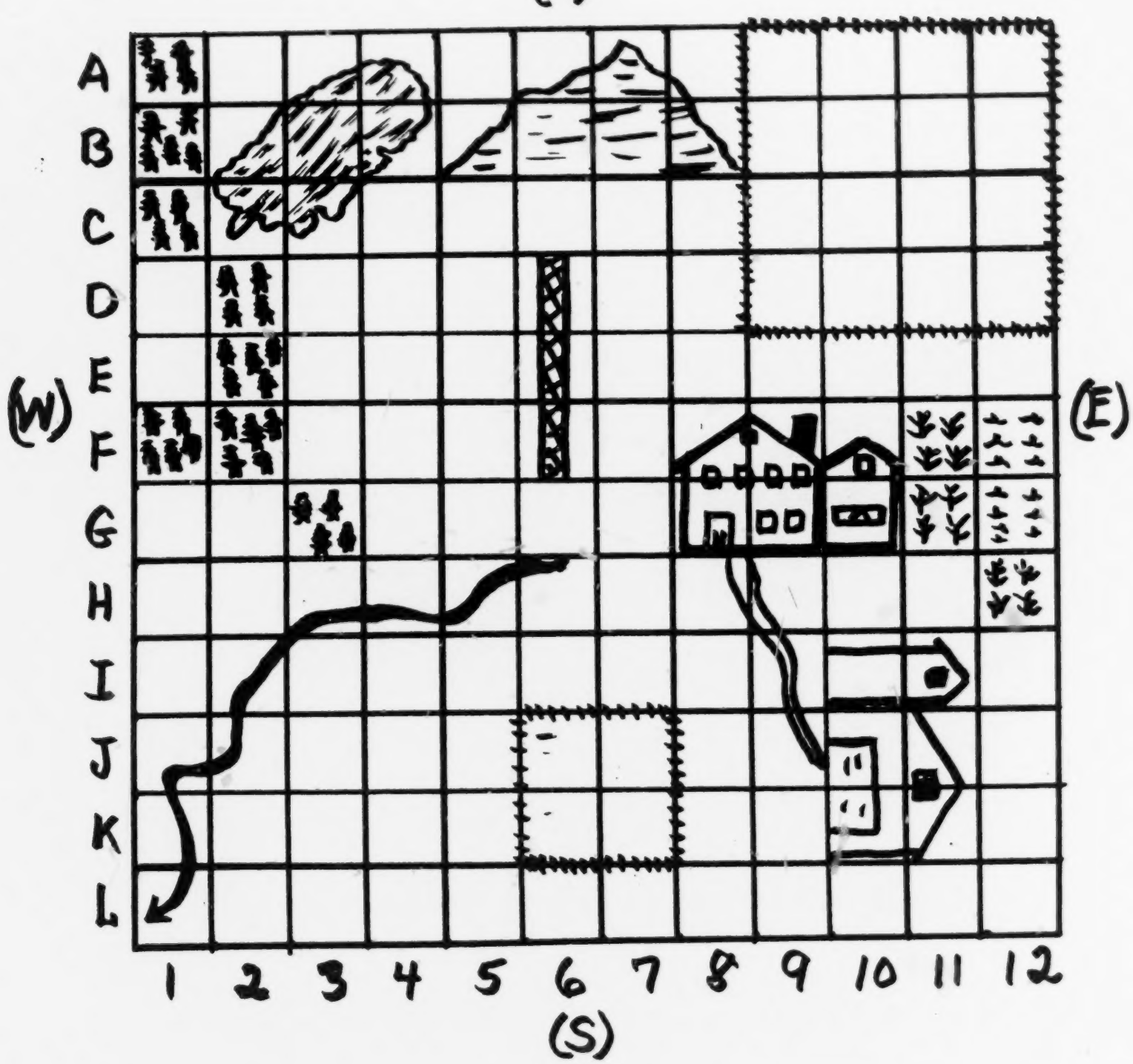
~ In the Country ~

This is a map of a farm and the land around it.

Have fun graphing!



4.

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Farm House is at G8, G9, —, —, —

Barn is at K10, —, —, —, —,
—

Cow Pasture is at A9, A10, —, —
B9,
C9,
D9,

Swimming Pond is at B2,

Road to Town is at H6,

Badminton is at F6

South Pasture is at K6,

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Garden is at H 12,

Wood lot is at A 1,

Mountain to Climb is at B 5,

7

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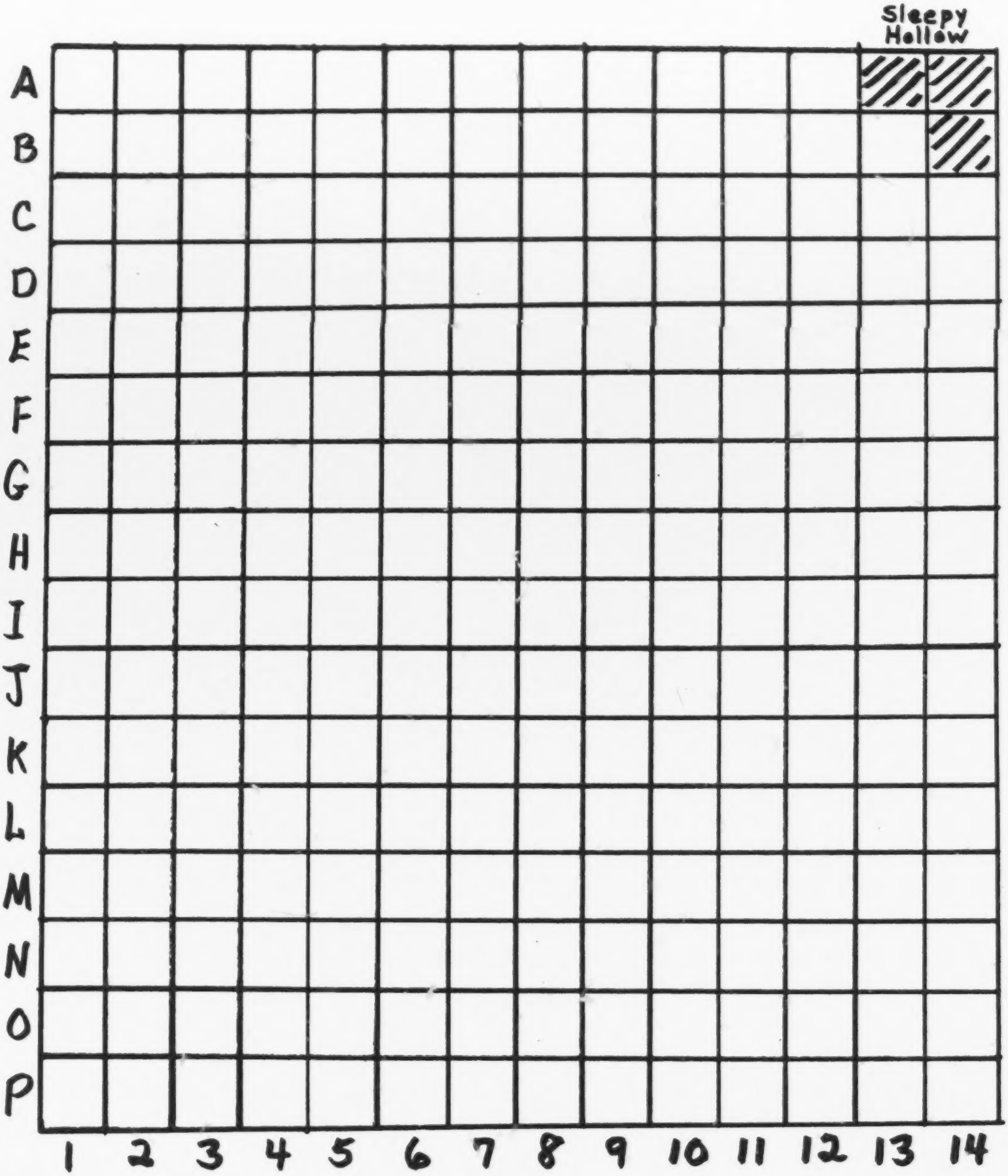
Have fun making a map!

Follow directions carefully!



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All set for a bike ride?

You start from Sleepy Hollow.

Shade in the places on your map which you travel near.

1) Sleepy Hollow is at A 13, A 14, B 14

2) Frog Pond is at B 11, C 10

3) Friendly Forest is at B 7, A 6, A 5, B 5, A 4, B 3, B 2, C 3

4) The Haunted House is at E 2, E 3, F 2

5) The Sandwich Shop is at G 6, H 7, I 8

6) Lake for Swimming is at K 4, K 3, K 2, L 4, L 5

7) A Hiking Path is at M 3, N 2, O 1, P 2, O 3, O 4, P 5

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8) A Beautiful Mountain is at N8, M9, L10, M11, M12, M13, N14

9) A Picnic Place is at J11, J12, I12

10) Woods to Bike Through at H11, H12, H13, H14

11) Store for Ice Cream at E13, E14

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MAPPING UNIT

Developed by:

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Wellesley Curriculum Resource Center

I. Introduction

II. Activities

A. Grade I

1. Distance

2. Direction

3. Symbols

B. Grade 2

1. Distance

2. Direction

3. Symbols

C. Grade 3

1. Distance

2. Direction

3. Symbols

III. Glossary

IV. Audio-Visual Materials

V. Map List

VI. Bibliography

I. INTRODUCTION

This unit consists of a group of developmental activities for the first, second and third grades. These activities will help the children become more aware of their environs by providing them with the tools to investigate, explore and map their surroundings.

The three main areas which are emphasized are: distance, direction, and symbols. The specific goals in each of these areas are:

1. Distance – to measure, compute distances and finally understand simple scales.
2. Direction – to follow simple directions and to locate specific areas on a map.
3. Symbols – to identify symbols and their function on a map.

By reinforcing the mapping activities in each grade with a variety of materials, the children will progress to a more sophisticated understanding of maps.

Since this is still an experimental unit, it is hoped that you will improvise, innovate and supplement with your own ideas. In the early spring a member of this committee will meet with you in your building to discuss any areas that were difficult, what new activities the children did and what suggestions you might have to improve this unit.

DISTANCE – GRADE I

A. Indoor Mapping

1. Using unconventional means (i.e., book, hand) measure objects in the room and length/width of room.
2. Using ruler, yardstick and/or measuring wheel measure
   a. length/width of room
   b. hands, feet, height of pupil
3. Familiarize children with words on distance cards by
   a. Working in pairs, children match opposites
   b. Working in pairs, one child pantomimes the meaning of a word. Partner tries to guess word.
   c. Play Concentration by matching opposites
4. Using large U. S. map children place mark to locate
   a. State where they were born
   b. Places they have travelled
   c. Places where relatives live

B. Outdoor Mapping

1. Using walking step, child walks home and measures the distance in time. Teacher records starting time and parent records finishing time. After computing amount of time taken, a chart is made comparing these times.
2. Using mounted photographs, identify each picture. Discuss who lives near/far from each picture. Which pictures are near/far from school.

DIRECTION – GRADE 1

A. Indoor Activities

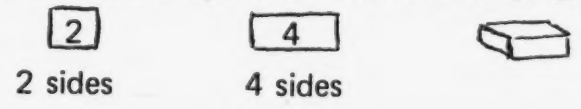
1. Using attribute blocks (available from Curriculum Center) one child will make a design and verbally direct partner to make identical design. Children will sit opposite each other.
2. Game can be varied by placing a screen between partners so that child is unable to see the original design.
3. Divide class into pairs. One partner picks two points in the classroom and calls them A and B. (There should be furniture between these two points.) The child then gives oral directions to his partner to go from point A to point B. Partner tries to follow the directions. This game may be repeated using different points and directions.
4. Children may illustrate direction word cards.
5. Games
   a. Direction word cards may be incorporated in the game Simon Says.
   b. Tic-tac-toe. On paper child draws tic-tac-toe diagram. Letter and number as a matrix. Child A tells Child B where to place child A's mark. Child B follows directions. Child B does the same.
   c. One child thinks of another child or object in the room. Using directional words, he describes location of child or object to the class. (i.e., It is near the door, in front of the teacher's desk.) Classmates try to guess object.
   d. Call out well known local landmarks, such as candy store, fire department. Children either point in direction of landmark or orally give directions for getting there.
6. Materials available at Curriculum Center.
   a. Transfer Patterns – Map 2-12
   b. Copy of U. S. A. Map – OM-1
   c. Copy of N. E. Map – OM-2

B. Outdoor Activities

1. Teacher makes 4 or 5 maps of playground. Divide class into 4 or 5 groups. Each group receives a map and follows directions to the treasure which has been hidden by the teacher. (See Social Studies Sampler, page 37-42.)
2. Divide class into pairs. One child picks 2 or 3 places on the playground. He orally directs his partner to these places.
3. Take a trip around the school block. Watch for fire boxes, hydrants, sewers, stop signs, etc. Take repeated trips for seasonal changes. Dramatize things seen on trip, describe sounds and smells, and verbally relate directions taken on trip.
4. Play Streets and Alleys with class. Consult gym teacher if directions are necessary.

SYMBOLS – GRADE I

A. Indoor Activities

1. Using picture envelope and symbol cards, match symbol with appropriate picture. This can be a paired, small group or class activity.
2. Using symbol cards and a map, child finds as many of the symbols as he can on the map.
3. Divide class into small groups. Each group makes imaginary map and symbols to go on it.
4. After drawing an imaginary map (by teacher or child) pupil states where various symbol cards can be placed.
5. Divide class into groups. Give each group 5 to 10 objects (i.e., eraser, ruler, blocks, thumbtack). Group makes a symbol for each object, Switch symbols. Have another group match symbols to object.
6. Make a class booklet of land forms and symbols.
7. Teacher will make each child a complete set of symbol cards. Teacher states characteristic of landform. Child holds up correct card.
8. Each child makes up riddles about landforms. Put riddles together into a class book.
9. Child draws picture of a favorite place or area where he would like to live.
10. See land form cards and directions.
11. Using blocks, child places a block on his desk. Each side of the block is examined at eye level. He draws the shape he sees. Repeat for each side of block.
12. Using blocks and block cards, match block with shapes on card. (Note to teacher: Each card represents one block. Numeral inside shape indicates number of that particular shape found on block.) 

2 sides 4 sides
13. Collect different kinds of maps. Divide class into groups. Each group studies a different map. Locate and identify different symbols found on each map.
14. Find pictures of different symbols used in advertisements (i.e.) Make a booklet.
15. Using a shadow box with an object behind it held by a child, a child in front draws a picture of the object behind screen.

B. Make a floor plan of classroom in the sand on playground. Discuss correct number of doors, rooms, windows. Gradually use symbols to represent doors, windows, etc.
   a. Floor plan of the classroom may eventually be constructed in the classroom.

C. Draw a floor plan for the home of the 3 Bears.

DISTANCE -- GRADE 2

A. Indoor Mapping

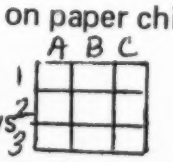
1. Using unconventional means (i.e., book, hand) measure objects in room and length/width of room.
2. Using ruler, yardstick and/or measuring wheel measure
   a. length and width of room
   b. distance from one point to antoher in classroom
   c. corridors -- find longest and shortest
   d. routes to designated areas in building (i.e., gym, library, office). compare distances
3. Using Large U. S. Map children place marker to locate:
   a. State where born
   b. State where parents born
   c. Places they have traveled
   4. Places where relatives live

B. Outdoor Mapping

1. Divide class into teams -- each team assigned a door. Each team measures distance from his door to designated area on the playground. Compare results. Discussion could follow regarding why one route may be shorter or longer than the other.
2. Using measuring wheel, or walking step, or any other method, child measures route home.
3. Make a chart comparing children's walks to and from school.
4. Measure rooms at home. (i.e., living room, bedroom). Compare size.
5. Child locates street light closest to home. How far away is it? Child then measures distance between the street light and the next street light. How far is it? Child then measures distance fr n second street light to next street light. Compare distance.
   Note to teacher: Electric Light Poles: 100-125'. Usually on lot corners. Try never to place directly in front of house. Try to place strategically so that light does not shine directly in the house.
6. Using mounted photograph locate place and mark on map. Note distance from school.

DIRECTION – GRADE 2

A. Indoor Activities

1. Using Attribute Blocks (available at Curriculum Center) child makes design and verbally directs partner to make identical design. Children will sit opposite each other.
2. Game can be varied by placing a screen between partners so that child is unable to see the original design.
3. Using Geoboards, same procedure as above may be followed.
4. Divide class in pairs. One partner picks two points in the classroom and calls them A and B. (There should be furniture between the two points.) Child then gives oral directions to his partner to go from Point A to Point B. Partner tries to follow directions. This may be repeated using different points and directions.
5. Map Making Activities
   a. Children make individual or class map of room. Hide object. Use map to locate hidden object.
   b. Child makes map of school for parents to show how to find his or her classroom at P. T. A. Open House.
6. Games
   a. Direction words may be incorporated in game of Simon Says (i.e., in out of left right toward away from)
   b. Zoo Game
   c. Iguana Game
   d. Tic-Tac-Toe Game – on paper child draws Tic-Tac-Toe diagram. Letter and number as a matrix. 

Child A tells Child B where to place Child A's mark. Child B follows directions. Child B does the same.
7. Materials Available through the Curriculum Center
   a. Matrix Map Puzzles – MAP-1
   b. Transfer patterns – MAP–2-12
   c. Copy of U.S.A. map – OM-1
   d. Copy of the N.E. States – OM-2

B. Outdoor Activities

1. Each child maps his route to school. Give map to a classmate who lives nearby. Can map be followed?
2. Child writes route to friend's house from his house and back again.

3. Child hides object somewhere on his route to school. Using map of route to school, child marks the place where object is located. Give map to friend to locate object.

4. Treasure Map of Playground
   Teacher makes 4 or 5 different maps of playground. Group class. Each group takes map and follows directions to treasure which has been hidden by teacher. (See Social Studies Sampler, page 37-42)

5. Giving Directions Outside. Divide class into partners. One child picks 2 or 3 places on playground. He orally directs his partner to these places.

6. Child chooses mounted photograph. Draw a map showing route from school to this location. Child then tells how to get back to school – orally or with map.

7. Class takes nature walk around area. Have children identify trees, rocks, etc., and possibly label them. Then draw a map to show where these are located. Invite another class to take nature walk.

8. Take a trip around the school block. Watch for fire boxes, stop signs, mail boxes, etc. Take repeated trips for seasonal changes. Dramatize things seen on trip, describe sounds and smells, and verbalize directions that were taken.

DIRECTIONS:

1. Draw a picture of what happens to the Iguana on the grid.

2. Make up your own story and share it with someone.

A DAY IN THE LIFE OF AN IGUANA

We find our friend "IGGIE" the Iguana resting under a rock at B-2. He decides to hunt for some tasty plants which he knows grows at F-5. As he is sitting peacefully eating away a prairie dog comes along. As quickly as he can move, he runs for a rock at H-8. Just in time too. The prairie dog has gone and poor Iggie is exhausted from all that running. A nice sunbath on top of the flat rock at J-11 will be just what he needs. Iggie climbs off the rock rested. He itches and scratches himself on the Ppaer Spine Cactus at K-10. OOh does that feel good. On no, a coyote spots Iggie. Quickly he squeezes under a rock at L-16. A sandstorm is what Iggie sees ahead of him at H-13. Under the sand he goes until it's over. Iggie goes to a rock at G-8 and closes his eyes and goes to sleep. What a tiring day!

SYMBOLS – GRADE 2

A. Indoor Activities

1. Using picture envelope and symbol cards match symbol card with appropriate picture. This can be a paired, small group or class activity.
2. Using symbol cards and a map child finds as many symbols as he can on the map.
3. Using land form cards and a map child finds as many land forms that are on the map.
4. After dividing class into small groups each group makes imaginary map and symbols to be placed on map. Groups can exchange maps. New group labels symbols.
5. Divide class into groups. Give each group 5-10 objects. (i.e., eraser, ruler, blocks, thumbtack) Group makes a symbol for each object. Switch symbols. Have another group match symbols with object.
6. After drawing an imaginary place, state where various symbol cards could be placed.
7. Make class, small group or individual picture dictionary of land forms. Collect pictures and label with appropriate symbol.
8. Make jigsaw puzzle map using heavy paper. Give to another group or individual to put together.
9. Group class. Children draw own map. Teacher states specifically what to be included
   a. Each group has different set of land forms.
   b. Exchange maps – group labels new map.
   c. rotate words so each group has opportunity to use all land forms.
10. Child makes up riddle about land forms. The riddles could be placed in class booklet.
11. See land form cards and directions.
12. Child draws picture of favorite area or place he would like to live. Then draw using symbols.
13. Pick several pictures from the picture envelope. Incorporate them into a story or poem.
14. Describe favorite place – draw map of it or how to get there. It could be imaginary or real.

B. Matching Blocks with Cards

1. Place block on desk. Examine one side at eye level. Draw the shape you see. Repeat for each side of block.
2. Using blocks and block cards match block with shapes on card.

*Note to teacher – each card is one block. Numerals inside shape indicate number of that particular shape found on block.

2 sides 4 sides object

C. Using Different Kinds of Maps

(collect different kinds of maps)

Divide children into groups. Each group studies different map (i.e., Wellesley map, Massachusetts map, New England map.) Locate and identify different symbols on each map.

D. Additional Activities

1. Discussion on road signs – shape, meaning, color, symbols.
2. Find pictures of different symbols used in advertisements.
   (i.e.,) Make booklet.
3. Using a shadow box child holds up object behind it. Child in front draws a picture of object behind screen.
4. Child makes a map of classroom using symbols. Hides something in room. Another child using map tries to find hidden object.
5. Class collects assorted boxes. Child makes model of room or house – imaginary or real.
6. Class collects assorted boxes and makes a model town.
7. Class or groups make map of town constructed.

DISTANCE – GRADE 3

A. Indoor Mapping

1. After estimating length/width of room, use ruler,yardstick and/or measuring wheel to measure the room. Compare estimate with actual measurement. Calculate difference between two measurements.
2. Using actual measurements of room, draw the outline of classroom on a matrix.
3. Using ruler, yardstick and/or measuring wheel measure
   a. distance between two points in the classroom
   b. corridors. Find longest and shortest.
   c. various routes to designated areas in building (i.e., gym, library, office) Compare distances.
4. Activities Involving Maps
   a. Using large U. S. map children place a marker to locate
      1. the state where they were born
      2. the state where their parents were born
      3. places they have traveled
      4. places where relatives live
5. After examining and comparing two maps including same area (i.e., U. S. map and Massachusetts map) children conclude that distance remains constant between two points. Note to teacher – The distance between two major cities on a state map will look much further apart than these cities on a U. S. Map.
6. Using a map with a mileage table, find the distance between two given towns. Using the mileage scale, measure the distance between the same two towns.

B. Outdoor Mapping

1. Class is divided into 5 or 6 groups. Using unconventional and/or conventional means measure perimeter of playground. Groups compare results.
2. A small group measures between bases on baseball diamond. Is the distance equal between each of the bases? Child could investigate to see if there is a standard measurement between bases.
3. Small groups of children could select equipment on playground to be measured. This could be drawn on the matrix.
4. Using measuring wheel, walking step or any other method the child chooses, take several routes home. Which is the shortest in time and/or distance?
5. Make chart comparing child's walks to and from school.
6. Each child measures perimeter of house, yard, etc.
7. Child loca[illegible]t closest to his home. How far away is it? Measure distance between hy[illegible]s on child's street. Is the distance equal? (There is not a standard distance between hydrants. Frequency of hydrants depends upon density of population.)

8. Using mounted photograph children find location of each picture on map of Wellesley.
   a. How far is each location from school? Compare results.
   b. Which child lives closest to each location?

DIRECTION – GRADE 3

A. Indoor Activities

1. Using attribute blocks (available from Curriculum Center) one child will make a design and verbally direct partner to make identical design. Children will sit opposite each other.
2. Game can be varied by placing a screen between partners so that child is unable to see the original design.
3. Using Geoboard same procedure as above may be followed.
4. Divide the class into two groups. In one group each child will have a map (as many different kinds of maps as possible). Each child with a map locates a town or river or lake, etc., and finds its coordinates. Each child in the other group goes to a child with a map, asks for the coordinates and locates the predetermined area. This can be repeated until all children have had the opportunity to participate in both groups.
5. Map making activities
   a. Divide class into pairs. One partner picks two points in the classroom and calls them A and B. (There should be furniture between the two points.) The child who picks the points writes the directions for his partner to go from Point A to Point B. Partner tries to follow directions. This may be repeated using different points and directions.
   b. Children make individual or group map of the classroom. They determine placement, scale and objects to be included. When finished see if map can be used to find an object in the room.
   c. Child makes a map of the school for his parents for P. T. A. Open House.
6. A child could invite a Kindergarten child on a tour of the school building.
7. Materials available through Curriculum Center
   a. Matrix Map Puzzle -- Map-1
   b. Transfer Patterns – Map-2-12
   c. Copy of the U.S.A. Map–OM-1
   d. Copy of N.E. Map –OM-2

B. Outdoor Activities

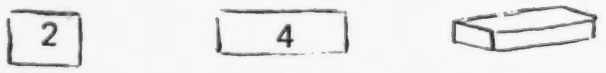
1. Each child maps his route to school. Give map to classmate who lives nearby. Can map be followed?
2. Child writes route from his home to friend's home. Write return route.
3. Child hides an object somewhere on his route to school. On his map, mark location of hidden object. Give map to friend. Can object be found?

4. Teacher makes four or five maps of playground. Divide class into four or five groups. Each group receives a map and follows directions to the treasure which has been hidden by the teacher. (See Social Studies Sampler, page 37-42)
5. Divide class into pairs. One child picks two or three places on the playground. He writes directions for partner to get to these places. A variation of this would involve child following directions in reverse.
6. Child chooses mounted photograph. Draw a map showing route from school to this location. Then child writes directions from the location back to the school.
7. After each child has had the opportunity to find one or more of the areas shown in the photographs, a class map of the area could be constructed. This would include all the areas shown in the photographs.
8. Nature walk. Class takes a walk in vicinity of school. Trees and flowers could be identified. (Trees could be labeled.) Map could be constructed indicating location of trees. Another class could be invited on a nature walk.

SYMBOLS -- GRADE 3

A. Indoor Activities

1. Using picture envelope and symbol cards, match symbol with appropriate picture. This can be a paired, small group or class activity.
2. Using symbol cards and a map, child finds as many of the symbols as he can on the map.
3. Using landform cards and a map child finds as many of the landforms that are on the map.
4. Divide class into small groups. Each group makes imaginary map and symbols are placed on map. Maps are exchanged and new group labels symbols.
5. Divide class into groups. Give each group 5 to 10 objects. (i.e., eraser, ruler, blocks) Group makes a symbol for each object. Switch symbols. Have another group match symbols with objects.
6. Make class, group or individual picture dictionaries of landforms and symbols.
7. Make jigsaw puzzle map using heavy cardboard. Give to another group or individual to put together.
8. Child draws a map and the teacher states those landforms to be included on map. A variation could be giving each group a different set of landforms. Maps could be exchanged and labeled by new group.
9. Child makes up riddles about landforms. May be put into a booklet.
10. Use landform cards and directions.
11. To correlate with Bulbs and Batteries unit group can make question and answer board using symbols and definitions. (Refer to Bulbs and Batteries for directions on making board.)
12. Pick several pictures from envelope. Incorporate them into a story or poem.
13. Using blocks child places a block on his desk. It is examined at eye level. Child draws the shape he sees. Repeat for each side of block.
14. Using blocks and block cards, child matches block with shapes on card. (Note to teacher: Each card represents one block. Numeral inside shape indicates the number of that particular shape found on block.)



2 sides 4 sides

15. Collect different kinds of maps. Divide children into groups. Each group is given a different map. Locate and identify different symbols found on each map.
16. Children look at different kinds of local maps. Compare colors, lines and symbols. Do they represent the same things? Do all lines on the map represent things you can actually see? Does the color of a highway symbol actually mean it is that color?

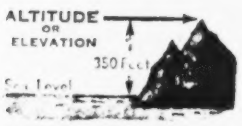
16. continued

    Does a road actually intersect a river? Can you see a boundary line? How do you know when you have crossed a state's boundary – a country's boundary? Are there any symbol colors which truly represent the color of the land form?

17. Discussion on road signs . . .shape, meaning, color, symbols.
18. Find pictures of different symbols used in advertisements. Make booklet.
19. Using a shadow box with an object behind, held by a child, a child in front draws a picture of the object behind the screen.
20. Child makes a map of the classroom using symbols. Hide something in the room. Another child, using map, tries to find object.
21. Class collects assorted boxes. Child makes a model of a house or room. This may be imaginary or real.
22. Class collects assorted boxes, then makes a model town or city. Map may be made of the model town or city.

B. Discuss stationary and non-stationary objects in classroom or on playground.
   1. Map desk, or contents of desk.
   2. Divide classroom into quadrants. Discuss child's place in quadrant. All children in each quadrant would map that quadrant. Put quadrants together to make complete room. Same procedure may be used for playground.

A Little Dictionary of Geographical Words



altitude. The height above sea level.

Antarctic. The cold region around the South Pole.

Antarctica. The continent around the South Pole.

Arctic. The cold region around the North Pole. Also an ocean.

bay. Part of a body of water which reaches into the land.

branch. A river or creek which flows into a larger river.

canyon. A deep narrow valley with steep sides.

cape. A point of land sticking out into a body of water.

channel. A deep, narrow body of water connecting two larger bodies of water; also the deeper part of a waterway.

cliff. A high steep wall of rock.

climate. The kind of weather a place has through the years.

continents. The largest bodies of land on the earth; larger than islands.

current. The movement of a stream of water.

delta. The land deposited at the mouth of a river.

desert. A land too dry or too cold to grow many plants.

divide. A height of land which separates river basins.

downstream. The direction toward which a river flows.

elevation. The height above sea level.

equator. An imaginary line around the earth that is the same distance from the North and South poles.

glacier. A large body of slowly moving ice.

globe. A map of the earth on a round ball.

growing season. The number of days when the weather is warm enough for plants to grow without being injured by a frost.

gulf. Part of a body of water which reaches into the land.

harbor. A sheltered place where ships may anchor safely.

highland. High or mountainous land.

hill. A raised and more or less rounded part of the earth's surface; smaller than a mountain.

iceberg. A floating mass of ice which has broken off from a glacier.

inland. Away from the seashore.

island. Land entirely surrounded by water; smaller than a continent.

isthmus. A narrow strip of land which connects two larger bodies of land.

jungle. A thick, tangled growth of trees and other plants.

lake. An inland body of water.

lowland. Low and usually level land.

mountain. High, rocky land, usually with steep sides and a pointed or rounded top; higher than a hill.

mountain peak. The pointed top of a mountain.

mountain range. A long row of mountains.

mouth (of a river). The place where the river flows into a larger body of water.

North Pole. The point on the earth that is farthest north.

oceans. The largest bodies of water on the earth.

peninsula. A body of land almost surrounded by water.

plain. A region which is mostly level, low land.

plateau. A region which is mostly flat, high land.

port. A place where boats can load and unload their cargoes.

prairie. A large area of grassland.

reservoir. A lake where water is stored for future use; sometimes formed by placing a dam across a river.

river. A large stream of water which flows through the land.

river basin. Land drained by a river and its branches.

river bed. The bottom of the river over which the water flows.

river valley. Low land through which a river flows.

sea. A large body of water partly or completely enclosed by land.

seashore. The place where the ocean meets the land.

season. A part of a year in which the weather conditions are somewhat alike. Summer is a season.

sound. A body of water separating one or more islands from the mainland.

source (of a river). The place where a river begins.

South Pole. The point on the earth which is farthest south.

strait. A narrow stretch of water which connects two larger bodies of water.

swamp. Land soaked with water.

tide. The regular rising and falling of the water of the ocean.

timber line. A point on a mountain above which trees cannot grow because of the cold.

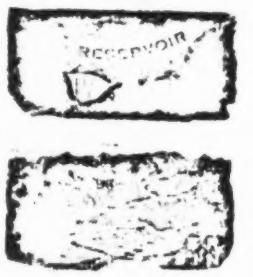
tributary. A river or creek which flows into a larger river.

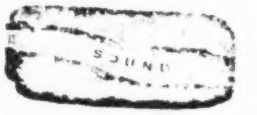
tropics. The warm region lying on both sides of the equator.

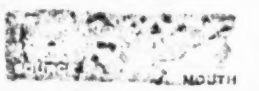
upstream. The direction from which a river flows.

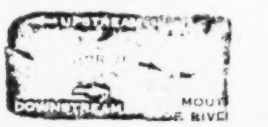
valley. Low land between hills or mountains.

volcano. A mountain formed of rock thrown up from inside the earth.









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